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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,180	11/09/2001	Daniel Amrany	60705-1331	4202
24504 7:	590 09/12/2002			
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750			EXAMINER	
			NGUYEN, KHANH V	
ATLANTA, GA 30339-5948		ART UNIT	PAPER NUMBER	
		•	2817	
			DATE MAILED: 09/12/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

_	1				
Application No.	Applicant(s)				
10/047,180	AMRANY ET AL.				
Office Action Summary Examiner	Art Unit				
Khanh V. Nguyen	2817				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
Period for Reply	T. (4) T. 41				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MON' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply if after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30).  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABAND.  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely earned patent term adjustment. See 37 CFR 1.704(b).  Status	be timely filed  O) days will be considered timely.  If from the mailing date of this communication.  DONED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on <u>09 November 2001</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) $\boxtimes$ Claim(s) <u>1-3,47-50 and 52-58</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-3,47-50,52-54 and 56</u> is/are rejected.					
7)⊠ Claim(s) <u>55,57 and 58</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120	40(-) (4) (5)				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.	100 - 40 - 1 A A A				
2. Certified copies of the priority documents have been received in Appli					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 1					
a) The translation of the foreign language provisional application has been 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§	received.				
Attachment(s)	3				
1) Notice of References Cited (PTO-892) / 4) Interview Sum	nmary (PTO-413) Paper No(s) rmal Patent Application (PTO-152)				

Art Unit: 2817

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 50 recites the limitation "the protective semiconductor devices" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Goordman (3,530,391).

Goordman (Fig. 1) discloses a bridge amplifier circuit comprising: a first amplifier comprising series combination of a first semiconductor device (22) and a second semiconductor device (42); a second amplifier comprising series combination of a third semiconductor device (24) and a fourth semiconductor device (44); resistors (75 and 76) located between the first semiconductor device (22) and the second semiconductor device (42); and resistors (78 and 79) located between the third semiconductor device (24) and a fourth semiconductor device (44), wherein the combination of resistors can

Art Unit: 2817

be read as a first and second integrated back-matching resistor networks respectively, the combination of resistors are match since they are voltage dividers.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 3, 47-49, 52-54, 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goordman (3,530,391).

Regarding claims 2, 3, 56, Goordman discloses the claimed invention except for selecting resistance value to match a desired expected input impedance. It would have been obvious to one having ordinary skill in the art at the time the invention was made to change to values of the resistors in order for it to match the input impedance, since it

Art Unit: 2817

has been held that discovering a optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 47-49, 52-54, (also note rejection under 35 U.S.C. 102)

Goordman discloses the claimed invention except for swinging the output signal a voltage exceeds the maximum drain-source (FET) voltage of the circuit. Goordman utilizes bipolar technology, however it is known in the art that bipolar and FET can be used interchangeably. Goordman discloses a plurality of resistors (75, 76, 78, 79) and plurality of semiconductor devices (22, 24, 42, 44) can be read as means for increasing the effective output signal swing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to increase to values of the resistors to maximize the output swing. Thus, the desired swing level would be considered a matter of design choice in the absence of unexpected results.

## Allowable Subject Matter

Claims 55, 57, 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 55, 57, 58 are allowed over the prior art because none of the prior art disclosed or suggested showing the particular structure and/or operation recited in these claims namely: a parallel combination of a first resistor in claim 55 and method

Art Unit: 2817

for protecting a corresponding semiconductor device when the corresponding semiconductor device is idle in claims 57, 58.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional reference (Bray (4,757,273)) shows further analogous prior art circuitry.

This art is deemed relevant and should be carefully reviews before any amendment is filed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (703) 306-9058. The examiner can normally be reached from 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service at (703) 872-9317.

 $\mathcal{N}KV$ 

09/06/02

Nguyen, Khanh Van Group 2800, Art Unit 2817